California State Lands Commission Hearing on BHP Billiton Cabrillo Port Liquefied Natural Gas Deepwater Port License Application Performing Arts and Convention Center Oxnard, California

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California enjoys a unique position in the world. If California were an independent country, it would represent the seventh largest economy in the world. Energy, in all its forms, is a key component of our robust economy. Historically, California has attempted to provide its citizens a diverse portfolio of energy options. We have long supported renewable energy and energy efficiency as energy supply options, and have sought to use our native solar, wind, and geothermal resources to provide our citizens environmentally-friendly energy options.

In fact, California has aggressively pursued cost-effective energy efficiency improvements and led the way in renewable energy in the United States. Since 1975, California's energy efficiency programs have reduced natural gas use per household by more than 50 percent.

California must continue to promote and foster efficiency improvements and the use of renewable energy to provide electricity to California's growing population while achieving the emission reduction targets outlined in the Global Warming Solutions Act of 2006 (AB 32). AB32 establishes in California law a requirement to achieve specific emission reduction standards for greenhouse gases, applying market mechanisms and regulatory measures.

California has established a Renewables Portfolio Standard (RPS) which directs the state's investor-owned utilities to increase the renewable portion of their energy mix, with a goal of 20 percent California's energy generation coming from renewable resources by 2010. The Energy Action Plan adopted by the Energy Commission and the California Public Utilities Commission (CPUC) calls for evaluating and developing implementation paths for achieving renewable goals beyond 2010, including 33 percent renewables by 2020 in light of cost-benefits and risk analysis.

In addition, under AB 32 the California Energy Commission and the California Public Utilities Commission will propose to the Air Resources Board specific greenhouse gas emission standards for all electric utilities in California. Further, SB 1368 requires the CEC to ensure that power purchased under future contracts for the publicly-owned utilities emits greenhouse gases at no higher than the rate of emissions of greenhouse gases from combined-cycle natural gas base load generation. California's publicly owned utilities import portions of their electricity from out-of-state generating units located in other western states.

Today, California's goals for renewable energy are the most ambitious in the nation. However, natural gas remains the primary fuel for the electricity generation market and is used to create over 40 percent (up from 20 percent thirty years ago) of California's electricity.

Natural gas fired electric generation is one of California's cleanest options for central station electric power. However, California produces only about 15 percent of the natural gas that is consumed in the state. The remaining gas must be imported. Imports currently come by eight major pipelines from four different production areas in other parts of North America, the Western U.S., as well as Canada. While sufficient pipeline capacity currently exists to bring this natural gas to our state, California is at the end of the pipeline and must compete with upstream customers, like Arizona and Nevada, whose use of natural gas is also increasing and at a faster rate than California's. As a result, use of existing interstate natural gas pipeline capacity can vary from year to year and seasonally.

Gas-fired electricity generation capacity in the United States has more than tripled since 2000. The greatest increase has occurred in the Electric Reliability Council (ERCOT, Texas), Southern Electricity Reliability Council (SERC, 16 southern states), and Western Electricity Coordinating Council (WECC, 14 western states, including California, and parts of Canada and Mexico). This rapid increase in natural gas use for electricity generation in the US will continue to constrain California's ability and cost to secure sufficient natural gas supplies.

Since 2001, the California Energy Commission has licensed 36 power plants (of 50 MW or greater) totaling 12,912 MW...all of which are fueled with natural gas. Thirteen power plant facilities are currently under review. Of these projects, only one facility greater than 50 MW is a combined hybrid power plant project using both natural gas and solar thermal. An additional 14 power plant project applications are expected in 2007 and about 60 percent of these projects will be fueled by natural gas.

In the past several years California, has experienced volatile natural gas prices – a permanent decrease in natural gas production and an increase in the cost of natural gas. To continue to provide its citizens a robust and growing economy, California must assure that an abundant source of reasonably priced natural gas is available.

Liquefied Natural Gas (LNG), a nontraditional supply source of natural gas, has the potential to provide new natural gas supply opportunities and additional infrastructure capacity into the West Coast, while creating coastal industrial development challenges.

In 2005, the California Resources Agency, with participation of the California Energy Commission and the Public Utilities Commission, held a two-day workshop on LNG access issues and deliverability of LNG supply for California.

The objectives of this workshop were to:

1. Explore ways to maximize the potential cost-saving benefits to natural gas consumers;

- Identify what can be done to: (a) ensure that potential licensees for offshore terminals operate terminals in a manner that maximizes potential cost-saving benefits to consumers, and (b) guard against potential market problems;
- 3. Explore if LNG, whether imported directly to California or indirectly through another state or country, will be a secure source of supply, and what, if anything, should be done to ensure a secure source of supply; and
- 4. Facilitate a discussion on these issues in order to elicit additional information that should be considered by the Administration.

The Energy Commission's 2003 and 2005 Integrated Energy Policy Report (IEPR), examined the supply and demand of natural gas to meet California's energy needs. The 2005 IEPR expanded on the 2003 IEPR by highlighting "the need for the development of LNG facilities and associated infrastructure to serve the natural gas needs of the western U.S." The 2005 report concluded that California should support the development of LNG facilities on the West Coast, but that any proposal to provide LNG to California must meet California's environmental and safety concerns.

The Energy Commission will continue to study this issue as part of our work on the 2007 IEPR. In fact, staff conducted a public workshop on March 26 and received valuable comments from the public and key stakeholders about crucial input needs, assumptions, and key issues for preparing the 2007 Natural Gas Assessment Report. That report will include an analysis of demand, supply, infrastructure and production and delivery costs of natural gas based on a reference case scenario. In addition, the report will evaluate results of at least two sensitivities of natural gas price to changes in oil prices.

The Energy Commission staff is pursuing a new approach for conducting its long-term natural gas assessment. Single point forecasts of natural gas prices, for example, will be used only as reference point for discussion in order to consider a broader range of possible outcomes and their implications for California's energy policy. Other changes since the 2005 report include (1) lessons learned from Hurricane Katrina that demonstrated how LNG and natural gas platforms are vulnerable, (2) security of LNG, (3) inclusion and updates of LNG facilities under construction, (4) treatment of the South Coast Air Quality Management District's challenge of the California Public Utilities Commission natural gas quality rules, and (5) the impacts of reducing greenhouse gas emissions of fuel use.

A staff draft report is expected to be complete in late May and a Committee Hearing is scheduled for June 7, 2007, to present the preliminary results. A Committee draft IEPR will be issued in September, followed by additional hearings to receive comments from the public and interested participants.

The proposed new natural gas assessment should be completed by this fall and adopted by the Commission in November 2007 (as required by Senate Bill 1389, statutes of 2002). Although the impacts of recent legislation and the Governor's Executive Order to reduce greenhouse gases may not be fully reflected in the demand forecast that will be used for this assessment, the impacts of these policies on both

electricity and natural gas use will be the subject of a workshop on July 9, to discuss the policy implications of a separate analysis under the 2007 IEPR that is looking at various electricity and natural gas scenarios. The results of this scenario project will also be included in the final 2007 IEPR in November.

Despite California's successful energy efficiency programs, the growing use of renewable sources of energy for electricity generation, and the slower growth in California natural gas demand compared to the rest of the nation, imported natural gas is needed to meet growing demand. LNG can provide an alternate, non-domestic source of natural gas with the potential of providing additional supply sources and introducing more competition into the West Coast natural gas market. Having access to a diverse portfolio of natural gas suppliers to provide competitive prices and ensure adequate supplies is prudent.

LNG from either the BHP Billiton Project <u>or other project proposed for the West Coast</u> could be an important component of California's diversified energy supply, but only if those projects fully comply with California's high safety and environmental standards.

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